Gel Electrophoresis buffers and solutions

50x TAE Buffer – 1 L
Add in following order
683 ml DI H_2O
242.0 g Tris base
18.61 g $Na_2EDTA•2H_2O$
57.1 mL acetic acid
mix

To make 1x TAE – 1L
20 mL 50x TAE
980 mL DI H_2O

10x TBE buffer
Add to 1 L bottle
108 g Tris Base
55 g Boric acid
40 mL of 0.5 M EDTA (pH 8)
Fill to 1L with DI H_2O

5x Tris-Glycine-SDS buffer
Add to 1 L bottle
900 mL DI H_2O
15.1 g Tris Base
94 g glycine
50 mL 10% SDS
Fill to 1 L DI H_2O

Ethidium Bromide (EtBr) 10mg/ml
add to 1.5 eppendorf tube
10 mg EtBr
990 µL DI H_2O

6X loading dye (TAE)
add to 1.5 ml eppendorf tube
600 µL 50% v/v glycerol
120 µL 50x TAE
180 µL DI H_2O
100 µL Promega 6X loading dye

6X loading dye (TAE)
add to 1.5 ml eppendorf tube
600 µL 50% v/v glycerol
300 µL 10x TBE
100 µL Promega 6X loading dye

DNA Markers
Dilute marker to 50 µg/mL
add 20 % volume of 6X loading dye
Load 12 µL (0.5 ug) per lane